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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,745	07/21/2003	Alexander Bubb	1032.WSP216US	6476
24041	7590	10/12/2004	EXAMINER	
SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406			LAZO, THOMAS E	
			ART UNIT	PAPER NUMBER

3745

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,745

Applicant(s)

BUBB ET AL.

Examiner

Thomas E. Lazo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8,11,12,15 and 16 is/are rejected.
- 7) ☒ Claim(s) 3-6,9,10,13 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/12/04, 6/9/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it is more the 150 words in length.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 8, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Surre (2,662,478). Surre discloses a safety diaphragm for a diaphragm pump with at least two diaphragm layers (e_1, e) each having opposing inner and outer surfaces and a peripheral edge and arranged so that the inner surfaces of the diaphragm layers are adjacent each other, the diaphragm from the peripheral edge towards a center having a clamping region running in a peripheral direction for fixing the diaphragm in a pump and having an adjacent operational region from the clamping region toward the center, the diaphragm layers (e_1, e) being connected to each other so that they are sealed against penetration of liquid and/or gas between the diaphragm layers and so that there is atmospheric or subatmospheric pressure between the diaphragm layers (e_1, e), the diaphragm in one section of the clamping region have a sensor region (e_3) where the diaphragm layers (e_1, e) are formed so that, in the case of an increase in

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pressure between the diaphragm layers (e_1, e), with an increase in the distance between the diaphragm layers, the layers in sensor region (e_3) deform more easily than in the other sections of the diaphragm, the peripheral edge is essentially circular, the diaphragm layers (e_1, e) in the section of the sensor region (e_3) have higher elasticity than in the other sections of the diaphragm, the inner surfaces facing one another of the diaphragm layers (e_1, e) in the section of the sensor region (e_3) are at a distance from one another, forming a cavity,

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surre, as applied to claims 1 and 2 above, in view of Horn (5,074,757). Surre discloses all of the claimed subject matter except for the center of the operational region having an actuating rod preferably tightly connected in form-locking manner with the diaphragm layers.

Horn teaches for a safety diaphragm with at least two diaphragm layers (18,19) each having opposing inner and outer surfaces and a peripheral edge and arranged so that the inner surfaces of the diaphragm layers (18,19) are adjacent each other, the diaphragm from the peripheral edge towards a center having a clamping region running in a peripheral direction for fixing the diaphragm in a pump and having an adjacent operational region from the clamping region toward the center, the diaphragm layers (18,19) being connected to each other so that they

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are sealed against penetration of liquid and/or gas between the diaphragm layers (18,19) and so that there is atmospheric or subatmospheric pressure between the diaphragm layers (18,19), the diaphragm in one section of the clamping region has a sensor region (22), and the peripheral edge is essentially circular, and that in the center of the operational region, an actuating rod is preferably tightly connected in form-locking manner with the diaphragm layers (18,19) for the purposes of directly actuating the safety diaphragm.

Since Surre and Horn are both safety diaphragms, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the safety diaphragm of Horn, based on the teachings of Surre, to have in the center of the operational region, an actuating rod, with which the diaphragm layers are preferably tightly connected in form-locking manner for the purposes of directly actuating the safety diaphragm.

Allowable Subject Matter

Claims 3-6, 9, 10, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of two patents.

Bowen (3,661,060) and Wilson et al. (3,131,638) are cited to show the safety diaphragms.

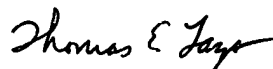
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Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (703) 308-2285. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (703) 308-1044. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to status of this application or proceeding should be direct to the Group receptionist whose telephone number is (703) 308-0861.



Thomas E. Lazo
Primary Examiner
Art Unit 3745

TEL
October 6, 2004